

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-2-106  
Relating to Certification of New Off-Road Compression-Ignition Engines

CUMMINS ENGINE COMPANY, INC.

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engine and emission control system produced by the manufacturer are certified as described below for use in off-road equipment:

Model Year: 2001

Typical Equipment Usage: Generator

Fuel Type: Diesel

<u>Engine Family</u>	Engine Displacement (liters)	Useful Life (hours)	Emission Control Systems and Special Features
1CEXL015.ABA (B103)	15.0	8000	Direct Diesel Injection Turbocharger Charge Air Cooler Engine Control Module

Engine models and codes are listed on attachments. Production engines shall be in all material respects the same as those for which certification is granted.

The exhaust emission certification standards and certification values for hydrocarbons (HC), oxides of nitrogen (NOx), or non-methane hydrocarbons plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) (units are expressed in grams per kilowatt-hour (g/kw-hr)), and the opacity-of-smoke certification standards and certification values in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family are as follows (Title 13, California Code of Regulations, Section 2423):


Engine Power Rating (kw)	Emission Standard Category	Exhaust Emissions (g/kw-hr)					Smoke Opacity (%)			
			HC	NOx	NMHC+NOx	CO	PM	Accel	Lug	Peak
KW>560	Tier 1	Standard	1.3	9.2	N/A	11.4	0.54	N/A	N/A	N/A
		Certification	0.1	8.6	--	1.0	0.11	--	--	--

BE IT FURTHER RESOLVED: That the listed engine models also comply with "Emission Control Labels— 1996 and Later Off-Road Compression-Ignition Engines" (Title 13, California Code of Regulations, Section 2424) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Sections 2425 and 2426).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed at El Monte, California this 22 day of February 2001.

  
for R. B. Summerfield, Chief  
Mobile Source Operations Division

ATTACHMENT

## Engine Model Summary Form

Manufacturer: Cummins Engine Company, Inc.  
Engine category: Nonroad CI  
EPA Engine Family: 1CEXL015.ABA  
Mfr Family Name: B103  
Process Code: New Submission

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1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
2483:FR10333	QSX15-G	775 @ 1800	435	260.5				DPI, TC, EC, CAC ↓ TC, EC TC, EC TC, EC TC, EC TC, EC TC, EC TC, EC TC, EC TC, EC
2483:FR10209	QSX15-G9	755 @ 1800	416	249				
2483:FR10301	QSX15-G7	685 @ 1800	357	214				
2483:FR10299	QSX15-G5	610 @ 1800	312	187				
2867:FR10333	QSX15-G	775 @ 1800	435	260.5				
2867:FR10209	QSX15-G9	755 @ 1800	416	249				
2867:FR10301	QSX15-G7	685 @ 1800	357	214				
2867:FR10299	QSX15-G5	610 @ 1800	312	187				
2900:FR10349	QSX15-G9	755 @ 1800	428	260				
2900:FR10350	QSX15-G7	685 @ 1800	364	221				
2900:FR10351	QSX15-G5	610 @ 1800	326	198				